POLYPHENYLENE DERIVATIVE AND ORGANIC ELECTROLUMINESCENT ELEMENT USING POLYPHENYLENE DERIVATIVE

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Publication date: 2003-11-11
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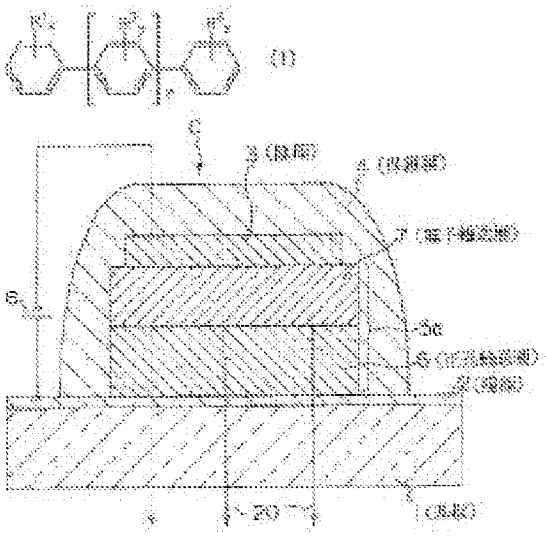
Applicant(s): SONY CORP
Classification:
- international: ***H01L51/50; C07C13/615; C07C15/16; C07C43/205; C09K11/06; H05B33/14; H05B33/22;*** **H01L51/50; C07C13/00; C07C15/00; C07C43/00; C09K11/06; H05B33/14; H05B33/22;** (IPC1-7): C07C13/615; C07C15/16; C07C43/205; C09K11/06; H05B33/14; H05B33/22
- European:
Application number: JP20020125222 20020426
Priority number(s): JP20020125222 20020426

Abstract of **JP 2003321403 (A)**

PROBLEM TO BE SOLVED: To obtain a polyphenylene derivative which has high solubility in an organic solvent, low crystallinity, an excellent heat stability and a high fluorescence quantum efficiency and an organic electroluminescent element emitting high-luminance and high-efficiency blue luminescence. ; SOLUTION: The polyphenylene derivative is represented by general formula (1) (R<SP>1</SP>, R<SP>2</SP>and R<SP>3</SP>may be the same or different and are each a hydrogen atom, a <=20C atomic group or group which may contain a substituent group; x, y and z are each independently an integer of <=5; n is an integer of <=8). The organic electroluminescent element contains the polyphenylene derivative in an organic layer. ; COPYRIGHT: (C)2004,JPO



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15/16		15/16		４Ｈ００６
43/205		43/205	Ｃ	
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	６９０		６９０	

審査請求　未請求　請求項の数11　ＯＬ　（全 13 頁）　最終頁に続く

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(54)【発明の名称】　ポリフェニレン誘導体、及びポリフェニレン誘導体を用いた有機電界発光素子

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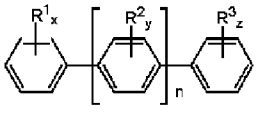

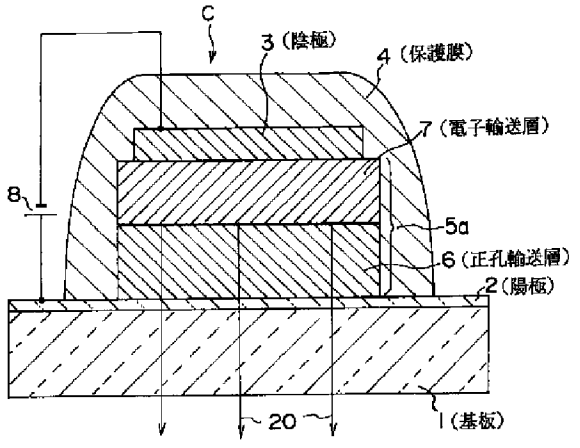

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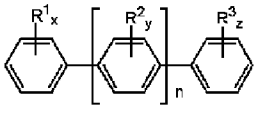

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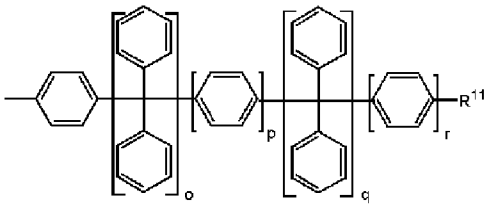

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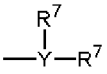

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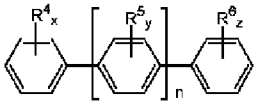

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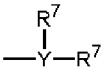

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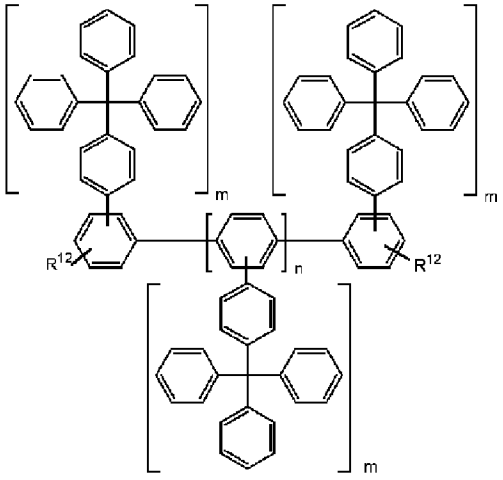

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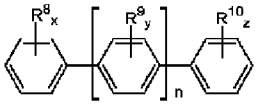

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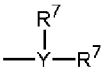

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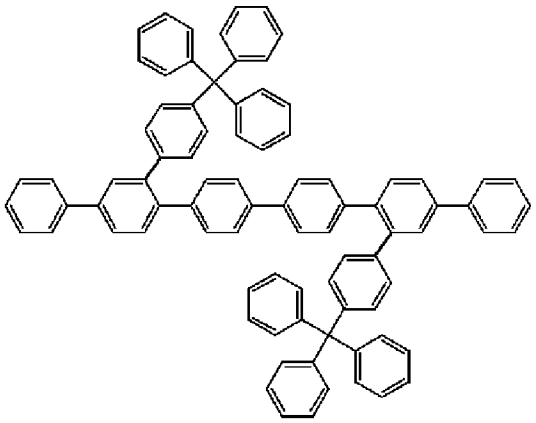

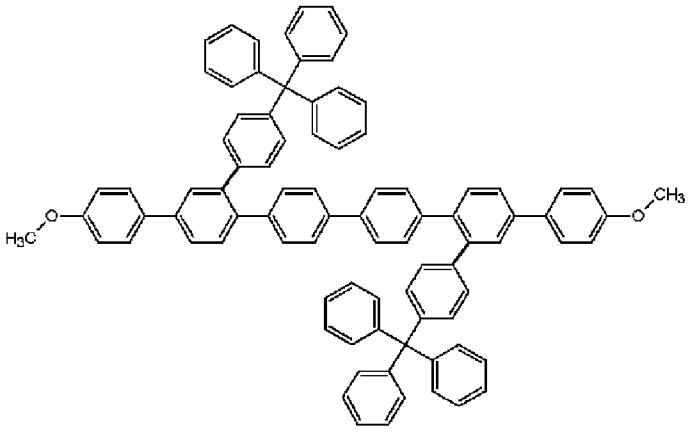

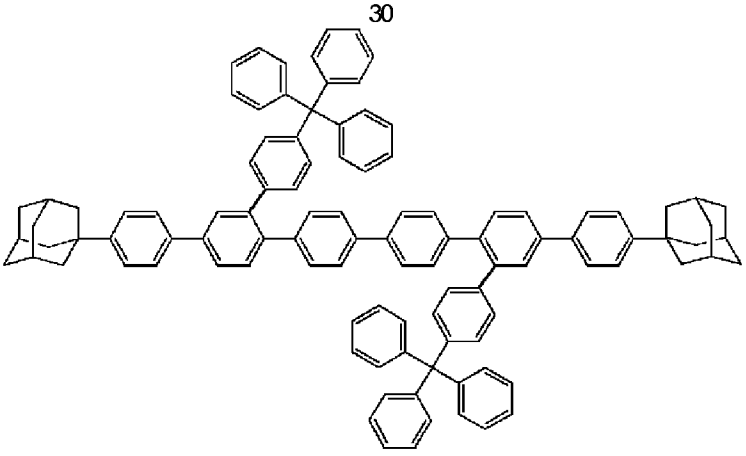

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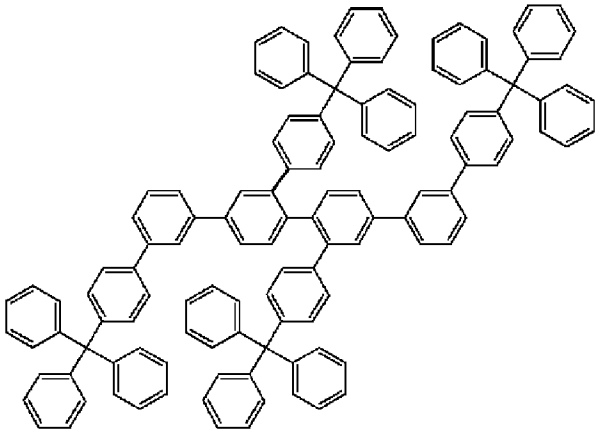

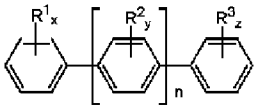

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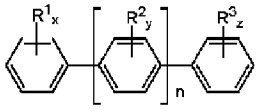

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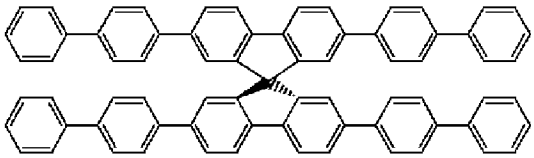

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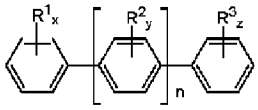

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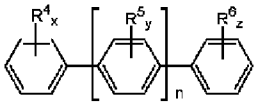

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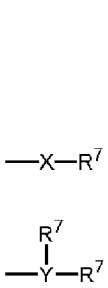

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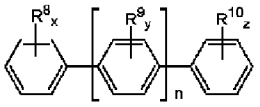

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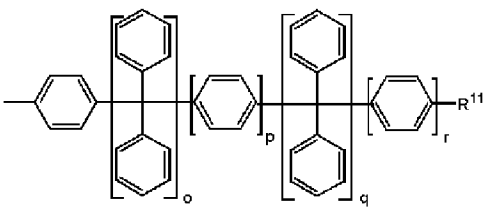

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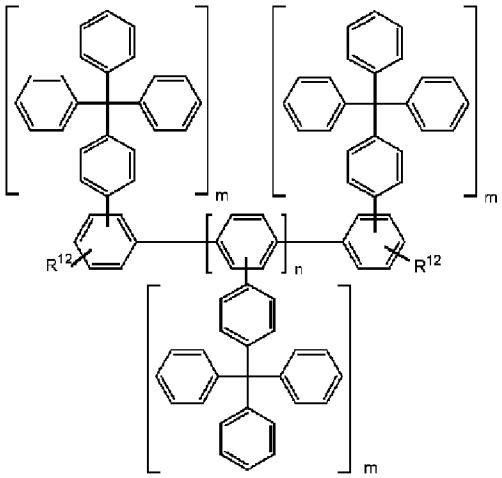

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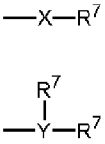

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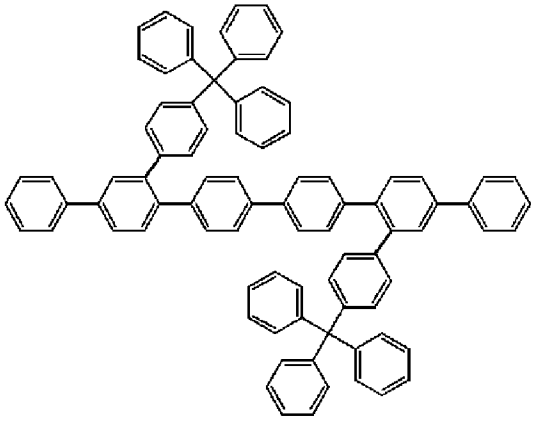

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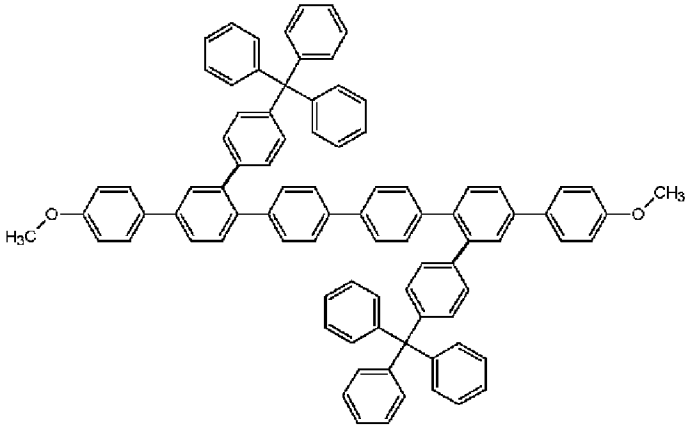

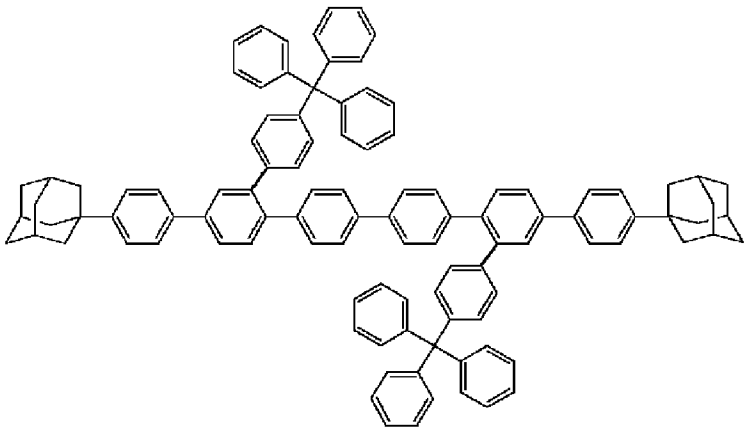

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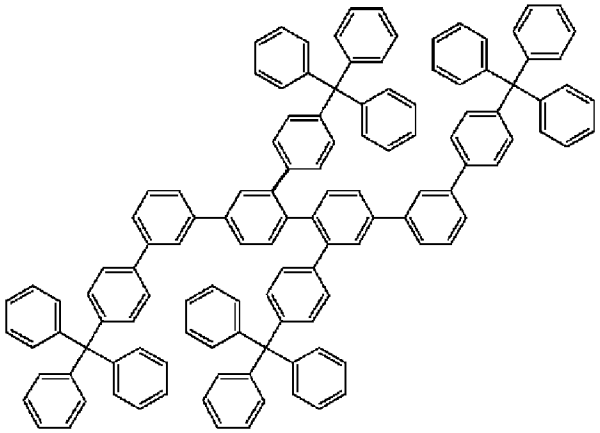
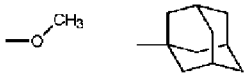


Thin Film Transistors

Indium tin oxide

Indium zinc oxide $_2$



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indiumtin oxide 2

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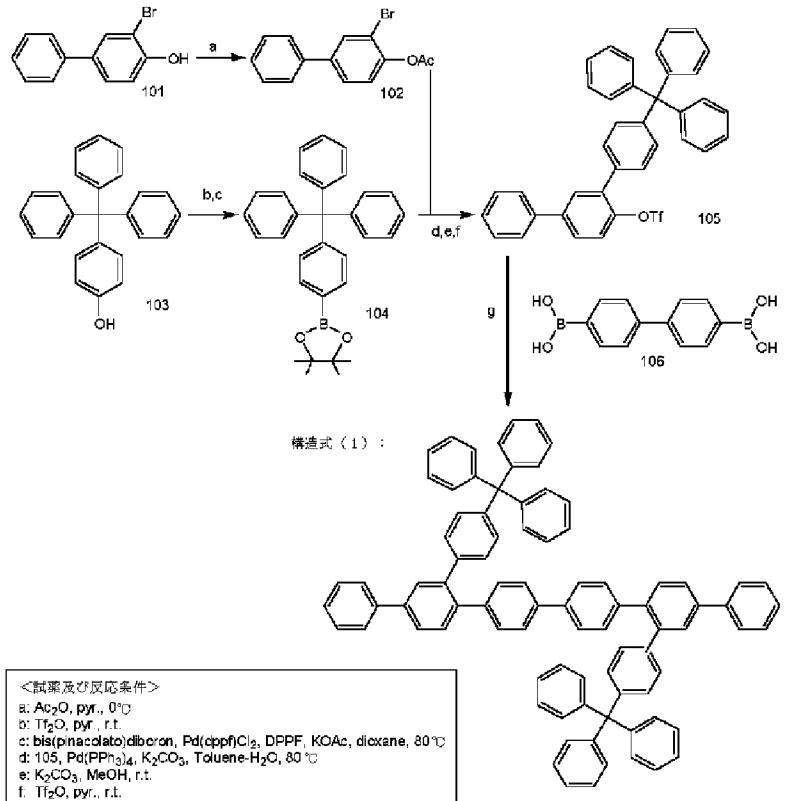
Br
OH
a
101
Br
OAc
102
b,c
103
OH
104
d,e,f
OTf
105
g
HO
B
HO
OH
B
OH
106
構造式（1）：
<試薬及び反応条件>
a: Ac2O, pyr., 0℃
b: Tf2O, pyr., r.t.
c: bis(pinacolato)diboron, Pd(dppf)Cl2, DPPF, KOAc, dioxane, 80℃
d: 105, Pd(PPh3)4, K2CO3, Toluene-H2O, 80℃
e: K2CO3, MeOH, r.t.
f: Tf2O, pyr., r.t.
g: 106, Pd(PPh3)4, K2CO3, Toluene-H2O

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10

① ⑦

①

×

Pyris 1 DSC

② ⑥

2 3 ①

⑥ ⑦

20 ① …

② , ”

2 3 …

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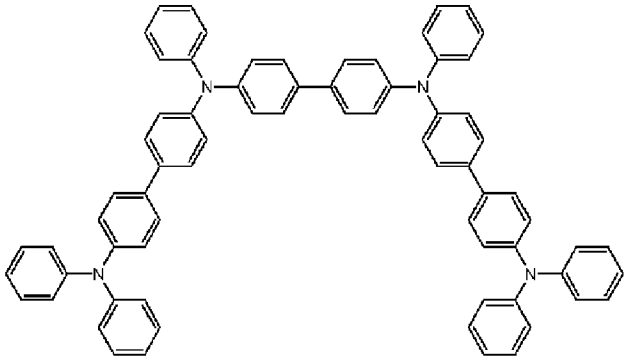
⑦ …



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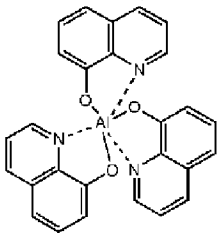

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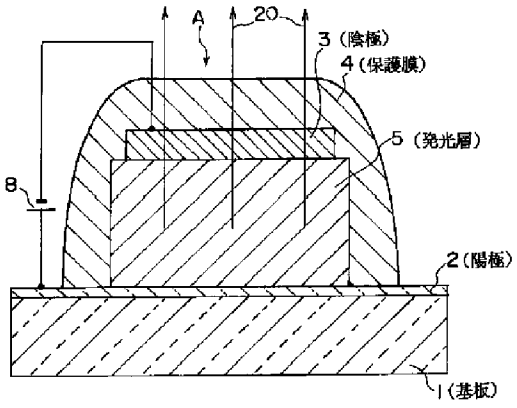

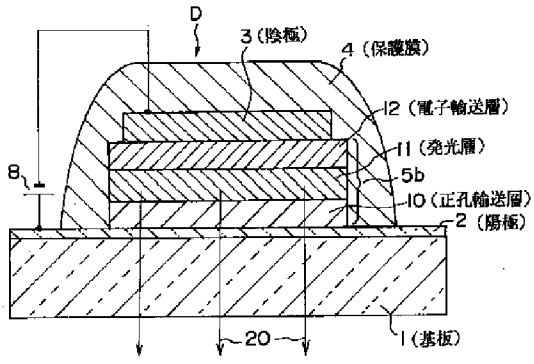

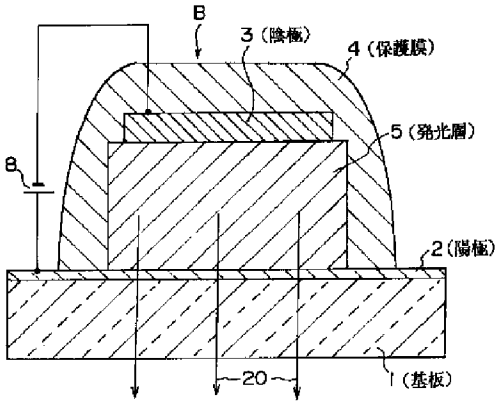

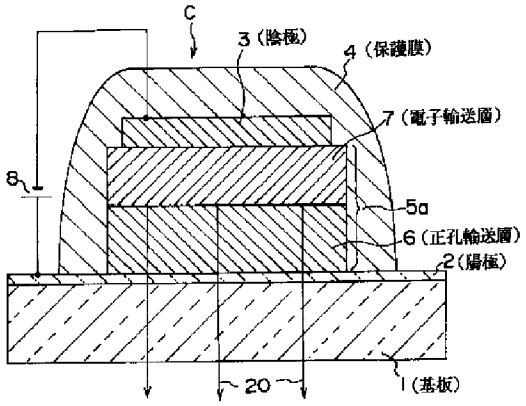

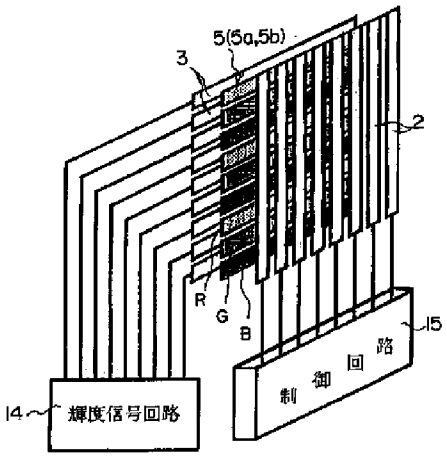

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(51) Int.Cl.[7]
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AB18 DB03
4H006 AA01 AA03 AB91